

San Jose, California

Population: **850,000**

Type of Community: **Urban**

Type of Program: **Four-sort**

Program Start Date: **July 1993**

We worked to educate residents away from the concept of unlimited garbage toward the idea of unlimited recycling.

Getting Started: Why Pay-As-You-Throw?

San Jose is the nation's eleventh largest city. Our residents are among the most educated and affluent in the country and represent a diverse community, with the two largest minority groups being Latino (27 percent) and Asian (14 percent).

Before July 1993, San Jose provided unlimited weekly garbage collection service at a flat monthly rate of \$12.50 per household. Residents set out an average of three 32-gallon garbage cans per week. The city fully implemented its Recycle Plus (RP) residential integrated waste management program for 186,000 single-family dwellings on July 1, 1993. This program was designed to permit the city to reach its California Integrated Waste Management Act goal of 50 percent waste reduction by 2000.

The new RP program resulted from over 3 years of planning that included extensive research on all major policy changes. This program includes a fully automated garbage collection system, an aggressive PAYT rate structure, a four-sort

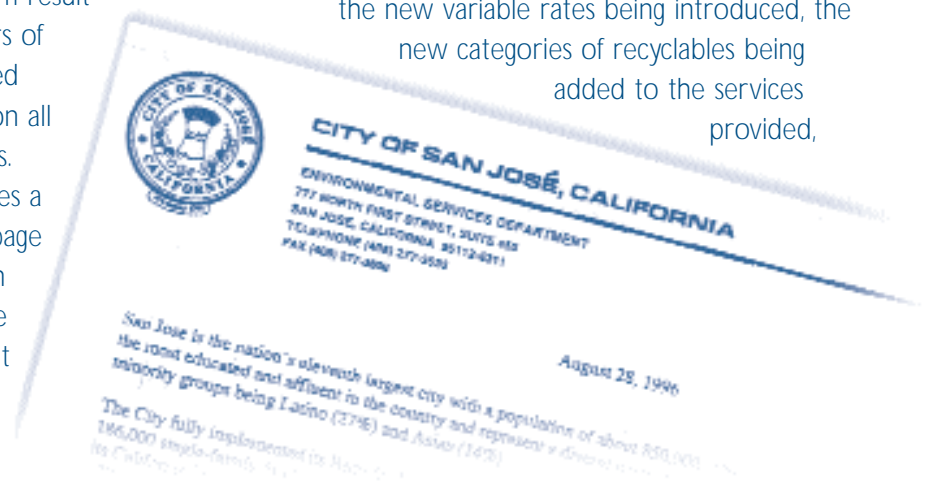
recycling system, and a contractor payment mechanism which provided financial incentives that encourage contractors to promote recycling.

Educating the Public

The public was involved in the design of the RP program through a questionnaire mailed to all 186,000 households; community meetings throughout the city; pilot projects in 17 neighborhoods for collection of yard trimmings and mixed papers; and the use of a public review committee to select the firms that would be given 6-year collection contracts for the collection of garbage and recyclables and for recyclables processing.

A comprehensive public outreach campaign aimed at single-family households explained the new variable rates being introduced, the new categories of recyclables being added to the services provided,

In the three years since our program began, an average of 87 percent of residents have requested 32-gallon cans—the smallest size we offer.





and the benefits of participating. All materials were produced in three languages (English, Spanish, and Vietnamese). The campaign was guided by the information received during a series of focus groups in the three languages, baseline and follow-up telephone surveys, and shopping mall intercept surveys. More than 250 community meetings were held in 1993, and a block leader program and school education program were organized.

Getting the Prices Right

Staff began researching unit-pricing structures for the new RP program in the spring of 1992 through surveys and interviews with successful PAYT communities nationwide. Residents were offered 32-, 64-, 96-, and 128-gallon carts with an “aggressive” unit-pricing structure. This structure provided a slight price break for each additional 32 gallons of capacity at the 64- and 96-gallon level, which the council considered important to help residents make the transition from flat rate to unit pricing.

We had to ensure that we had sufficient quantities of wheeled-garbage carts in the sizes the residents would request. We sent out a return-reply card to all single-family households in January 1993 with our estimated rates, and let residents know that no reply would result in delivery of the default 32-gallon cart.

Staff was able to work out a compromise with the city council, which included offering one of the most comprehensive low-income rate assistance programs for garbage service in the state. Criteria were based solely on

household size and income and permitted eligible residents to receive a 30 percent discount on their bill. About 3,400 households currently participate in this program.

Managing the Program Costs

The challenge faced by the program is to both continue and expand its multi-pronged recycling efforts to meet diversion goals, while reducing costs to close the projected \$5 million cost-to-revenue gap in five years. The city already has reduced costs by over \$4 million annually through contract renegotiations that resulted in extending the term of the RP and yard-trimming collection contracts from June 1999 to June 2002.

Success: Waste Reduction and Increased Recycling

Staff did not anticipate how quickly residents would change their recycling participation to accommodate the 32-gallon size cart, especially since prior to RP the average set-out was three garbage cans. Since RP implementation, an average of 87 percent of residents have requested the 32-gallon size.

The difference between the “before and after” garbage set-out volume could readily be found in the quantity of recyclables collected in the new RP program. The volume of recyclables and yard trimmings being collected more than doubled the levels recorded prior to RP. Most importantly, residents reported wide satisfaction with the program and its results (80 percent in 1993 to 90 percent in 1996. Figures are based on a random sample telephone survey).

PAY-AS-YOU-THROW SUCCESS STORIES

South Kingstown, Rhode Island

Population: 30,000

Type of Community: Suburban

Type of Program: Drop-off, Tags

Program Start Date: August 1994

With pay-as-you-throw, the average family of four has reduced its solid waste stream to one tagged bag of waste and one bag of recyclables per week.

Getting Started: Why Pay-As-You-Throw?

Solid waste for South Kingstown and its regional partner Narragansett is processed at the town's Rose Hill Regional Transfer Station (RHRTS). Given the community's oceanfront shoreline, the approximate year-round population of 22,000 residents swells to an estimated 30,000 persons in the summer months. Residents of both communities can dispose of solid waste by either contracting with a private refuse hauler or by directly accessing the transfer station.

After facility operations began at RHRTS in 1983, the disposal cost to "direct access" residential users continued to escalate. This increase in disposal costs was due in part to increasing tipping fees, higher processing costs,

and abuse of a flat-rate annual vehicle pass program, which provided unlimited disposal with little or no incentive to recycle materials. Because of these concerns, South Kingstown and Narragansett initiated a volume-based tag solid waste disposal system and a voluntary source reduction recycling program for RHRTS residential users.

How Does It Work?

Under the tag solid waste disposal system, each residential user directly accessing the transfer station is required to purchase refuse tags (\$10.00 for 10 tags) for solid waste disposal. Residential RHRTS customers place a tag on each garbage bag

The success of both the volume-based disposal system and the enhanced recycling facility has exceeded all pre-operational expectations.



Tel. 401-789-9331

Town of South Kingstown, Rhode Island

P.O. Box 31
Wakefield, RI 02880-0031

July 18, 1996

TOWN OF SOUTH KINGSTON

PAY-AS-YOU-THROW TESTIMONIAL



(35-pound/33-gallon limit) prior to disposal. Refuse tags were chosen in lieu of bags to provide residents free choice with regard to the size and type of refuse bag they were accustomed to using.

Some residents continue to use trash cans for refuse disposal. The RHRTS operates as a solid waste enterprise fund, and operational costs are covered by the cost of the refuse tags.

Utilization of the recycling center by residential RHRTS users continues to remain a voluntary decision. Residents who maximize their recycling efforts can minimize tag purchases and reduce their overall solid waste disposal costs. RHRTS residential users with wasteful disposal habits who choose not to recycle must consequently purchase additional tags.

Complementary Programs

Residential users can dispose of bulky waste and yard waste at a rate of 5 cents and 3.5 cents per pound, respectively. Residents may also elect to purchase yard waste bags at a cost of 75 cents each (which includes the disposal fee) for disposal of grass clippings and leaves.

In addition, the town constructed new recycling disposal facilities for direct access residential users that became operational on August 1, 1994. The enhanced recycling center accepts a wide variety of materials that can be recycled by residents at no cost, including aluminum, steel, plastic, newspaper,

glass, and many others. Yard waste, uncontaminated wood demolition, and ferrous and nonferrous scrap metals are also recycled, but are assessed a tip fee due to associated processing costs.

Success: Saving Money and Reducing Waste

The success of both the volume-based disposal system and enhanced recycling facility has exceeded all pre-operational expectations. The capture ratio of recyclables from direct access residential users has consistently reached approximately 40 percent, with levels as high as 51 percent (not including bulky or recyclable yard waste). Recycling capture ratios approach 60 percent if yard waste and bulky recycled waste estimates are included.

Under the PAYT program, RHRTS residential users discharged approximately 2,175 tons during fiscal year 1994-95, as compared with 7,608 tons in fiscal year 1991-92 under the former vehicle sticker program. The average family of four has reduced its solid waste stream to one tagged bag and one bag of recyclables per week. This equates to a total yearly refuse disposal cost of \$52 per year, which is a \$40 savings from the previous year's average cost of \$92. Elderly and single residents have reported a reduction in solid waste disposal to as low as one refuse bag every two weeks, for a total yearly refuse disposal cost of \$26.

PAY-AS-YOU-THROW SUCCESS STORIES

Vancouver, Washington

Population: **69,000**

Type of Community: **Urban**

Type of Program: **Cans**

Program Start Date: **January 1990**

An excellent public information and education program is imperative.

Getting Started: Why Pay-As-You-Throw?

The city of Vancouver is located in Clark County, the southernmost county in the state of Washington, along the north shore of the Columbia River. Garbage collection service in the city is mandatory and has been a contracted service since 1937. In 1989, the state of Washington passed the Waste Not Washington Act, which required cities and counties to implement programs aimed at reaching a statewide goal of 50 percent waste reduction and recycling by 1995. In an effort to reduce our reliance on landfill disposal and to meet local and statewide goals, the city adopted the philosophy, "The more you use, the more you pay."

basic service and a corresponding decrease in customers choosing the two-can service.

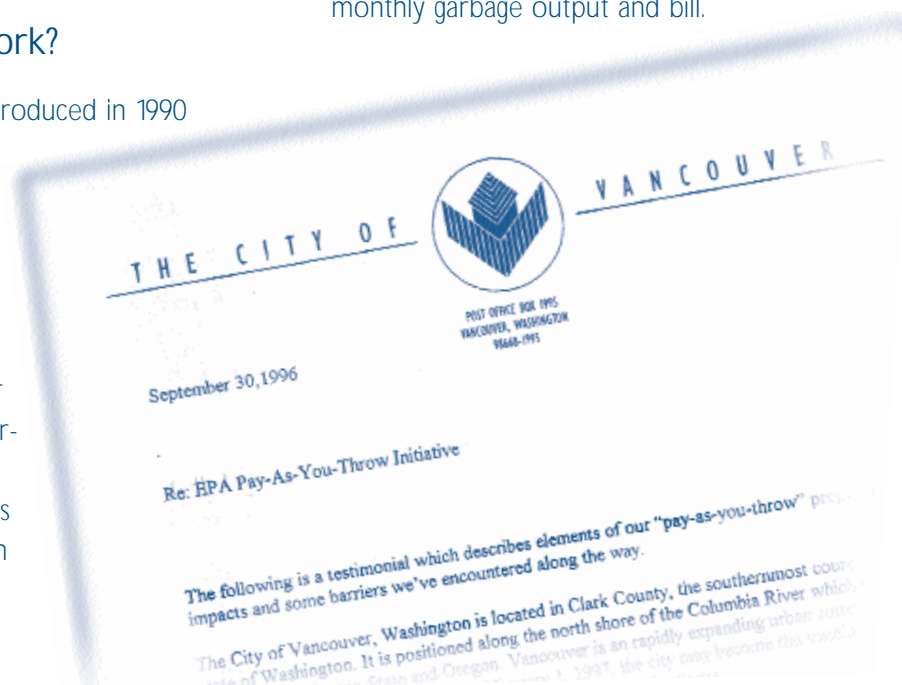
In 1992, the city implemented a weekly mini-can option, and within five months nearly 500 residents had switched to the mini-can. By the end of the following year, this number had doubled and the city was receiving numerous customer requests for more service choices. Three new residential garbage service level options were implemented: every-other-week 32-gallon can, every-other-week mini-can, and monthly 32-gallon can service. These options are increasingly being utilized as customers learn how waste reduction and avid recycling can help them reduce their monthly garbage output and bill.

How Does It Work?

Linear rates were introduced in 1990

when the city council approved a rate increase that made the second can rate 84 percent greater than the first can. After 15 months, our data showed a 13 percent increase in the number of customers choosing the one-can

Two years into our program, residents had significantly increased their recycling—and many had also requested services that could help them reduce waste even more!





Complementary Programs

In 1992, in cooperation with Clark County, the city implemented a curbside recycling program. The program is mandatory for single-family households, and all households are billed \$3.10 per month for weekly recycling as part of their garbage service. A similar program is also available to all multifamily complexes within the city limits.

The city's contracted hauler also offers a voluntary yard debris collection program. For a monthly fee (\$5.55), customers can set out up to 96 gallons of material. Since the program is voluntary, it does not conflict with citizens who choose to compost their organic wastes at home or self-haul to local composting facilities.

Meeting the Challenges: Tips for Other Communities

Vancouver has encountered a variety of challenges throughout the past several years, and we hope that other jurisdictions may benefit from our experiences. A significant concern has been whether we are receiving accurate and up-to-date data from our garbage and recycling program service providers. It is important to select providers who have excellent computer tracking and reporting systems and adequate staffing in place to accomplish these needs. All solid waste programs require the contractor to provide monthly reports that enable the city to track the program's activities and monitor progress.

An excellent public information and education program is imperative. Although our experiences with new program campaigns have been very positive, it has been a challenge to ensure that all citizens are informed

about new and existing programs and the different service levels available to them. Our ongoing challenge has been finding sufficient time and resources to dedicate to frequent, targeted public relations campaigns.

When the city first attempted to implement our once-a-month collection option, it was not approved. The city council, along with the local health district, had concerns about its potential negative impact on health and safety. Monthly service was eventually approved due to the pressure from recently annexed citizens, namely avid recyclers and senior citizens who were used to handling recycling and garbage on their own. The variety of service options, although positive from a waste reduction and customer standpoint, increases the instability of the revenue stream for the service providers and makes enforcement of mandatory collection more difficult.

Program Success

We have found volume-based linear rates to be an effective tool for encouraging residents and businesses to examine their disposal habits, to recycle more, and to decrease their garbage service levels. The city exceeded its 50 percent recycling goal by the end of 1995. Based on available data sources, it was determined that 51 percent of the city's wastes were recycled and 49 percent were disposed of in the landfill that year. While some residents are motivated by environmental stewardship, others are encouraged to change habits based on their pocketbooks. Although volume-based linear rates pose challenges, we believe that they are the driving force behind our success in meeting our waste reduction and recycling goals.

Vancouver's success story was compiled by Andrea Friedrichsen and Tamera J. Kihs, Solid Waste Program Manager, (360) 696-8186.